



# Digital transformation of the food system

Alexandra Jeremiasson, Senior Research Officer at Formas SLU, 20190529



## National research programmes

FORMAS :



Vetenskapsråde

Sustainable spatial planning Climate

Working life Applied welfare Migration

Antibiotic resistance

Food

Strategic research agendas Programme committés

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## National research program for food

Mission to Formas in "A National food strategy for Sweden – more jobs and sustainable growth throughout the country" (2016/17:104)

Action plan part 3, June 1, 2017

Needs-driven research, innovation, dissemination and commercialisation of research results and increased knowledge in the food chain





#### A national food strategy for Sweden

Prop. 2016/17:104

#### Vision 2030

The Swedish food chain in 2030 is globally competitive, innovative, sustainable and attractive to operate within.

#### **Overall objective**

Competitive food supply chain that

- · increases overall food production, while
- · achieving the relevant national environmental objectives,
- · aiming to generate growth and employment, and
- · contribute to sustainable development throughout the country.

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### A national food strategy for Sweden

Prop. 2016/17:104

Three strategic areas:

- · Rules and regulations
- · Consumers and markets
- Knowledge and innovation

The objective for the strategic area 'Knowledge and innovation' is to support the knowledge and innovation system so as to contribute to increased productivity and innovation in the food supply chain and the sustainable production and consumption of food.

## The National research program for Food

- 10-y programme
- Interdisciplinary
- · Create synergies between actors
- · Based on a joint strategic research agenda
- Budget SEK 35 million / year (from 2019 onwards) governmental funding + cofunding
- The National Committee for Food Research
  - = Program Council



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#### Digital transformation of the food system - Background

- Identified needs of future research in the research agenda of the National program for food by performer – and recipients of research
- Report from OECD 2018: Digital techniques can develop, stimulate and improve quality and productivity of research in different disciplines
- Formas' strategy for digitalisation to promote sustainable development of society
- · Innovation is part of Sweden's digitalisation strategy
- · Opens for collaboration, which may come in use in society
- Enables research and projects which are close to application and innovation

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### Why digital transformation?

- The food sector has much to gain by integrating the usage of cutting-edge digital competence and digital tools
- Strong digital trend leading to changes in consumer behaviour and gives new needs and opportunities for development in the food sector
- Can contribute to:
  - New products, processes and services that enforces the productivity and sustainability of the sector
  - Increase the level of knowledge and competence regarding digital technologies in food science
  - ... which in turn contributes to maintaining high quality in food research and creates prerequisites for the sector's attractiveness and competitiveness in the long term

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#### Purpose and focus

Promote research projects with a clear interdisciplinary approach, which combines food science research with digital competences

- Research projects that aims to apply digital tools in food science
- Collaborations between researchers within academia/research institutes and public sector/industry in research- and development projects to create new digital services, products and processes in the food system

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### Other questions of interest

- How are different actors in the food system affected and integrated with the digital transformation?
- Development of artificial intelligence and automation
- Fulfilment of society's increased demand for transparency and traceability
- Reduction of loss and waste and the emergence of new digital business models
- How does an increased digital transformation of the food system affect society with possibilities and critical aspects such as health, law, ethics and morals?

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New collaborations and collaboration between different parts of society is encouraged!

### Grant amount and project duration

- maximum 15 million SEK for three years
- maximum of five million SEK per year, on average, over the years the application is valid for
- applicants may not apply for 15 million SEK in total for a period shorter than 36 months
- Co-funding is welcomed and encouraged. For example, co-funding, in the form of time contributions (in-kind)
- Project duration is 2019 2021. The funding may be spent throughout 2022
- the projects' first 12 months will be paid in December 2019

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### What qualifies for funding?

- In addition to salary funding, funding to cover operating costs (consumables, equipment, travel, conferences, publication in peer-reviewed journals and open-access databases), depreciation costs for equipment, and premises costs
- · Salary for PhD students can be granted for up to three years
- Note that the total salary amount for a single researcher, PhD student or other staff
  must not exceed 100 percent of full-time employment, i.e additional salary funding
  cannot be granted to researchers, PhD students or other staff who already receive
  grants or contributions with full salary funding
- Formas does not grant funding for annual salary increases
- Grants from Formas can be used to fund research that is partly conducted outside Sweden, although the research must be initiated and managed from Sweden

### Who can apply ?

- Universities, colleges, research institutes, companies and other organisations that is approved by Formas as an administrating organisation
- · Sole proprietorship businesses cannot be granted funding under this call
- At collaboration between academia and industry, all participating parts should be applicants (main applicant or co-applicants)
- All projects must have a responsible project manager. Main applicant must have a doctoral degree

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#### State aid regulations

Private companies and other organisations engaged in economic activity that want to apply for grants from Formas are subjected to state aid regulations

The provisions enabling Formas to provide funding to organisations are contained in the Swedish government's Regulation (2017:195) on state aid for research and development and innovation in the environment, agricultural sciences and spatial planning.

It is based on the European Commission's General Block Exemption and on the EU de minimis regulation

The regulations are based on the principle of EU law that state aid to enterprises normally distorts competition, but that certain exemptions are allowed. These exemptions include support for research and development as well as innovation

#### De minimis aid rules

The maximum de minimis aid Formas can grant is 200,000 euros over a period of three consecutive fiscal years

#### Sample calculation

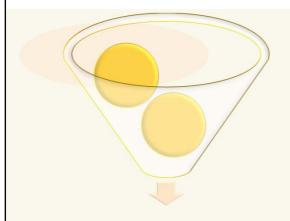
If your company receives funding of 50,000 euros the first year, we can grant a maximum of 150,000 euros the second year. In the third year, your company cannot receive any more funding of this type. During the fourth year, we can grant 50,000 euros

Anyone applying for de minimis aid must submit a statement that states the amount of aid received during the previous two fiscal years and the current fiscal year

If an organisation has received funding in error or has received an amount that is too high, then the aid might have to be returned in its entirety.

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#### Assessment of applications



The applications will be evaluated by a panel of active researchers as well as experts in the field of digital research and digital competence

The panel's evaluations and prioritisation of applications will constitute information for Formas' Scientific Council

The Formas' Scientific Council plans to make its decision on November 20, 2019.



## **Evaluation of applications**

- The panel members indicate level of competence for each application in the panel.
- · Four reviewers per application
- · Assessments are compiled
- · Panel will meet to discuss and rank the applications
- · Decision on which applications to discuss at the meeting

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#### Evaluation criteria

- Potential, relevance and quality
- · Gender equality and sustainability
- Feasibility
- Actors

Reviews are made solely on the information in the application

Address each criterion clearly!

